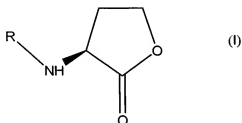


**AMENDMENTS TO THE CLAIMS:**

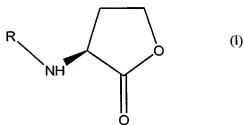
This listing of claims will replace all prior versions and listings of claims in the application. Please amend the claims as follows:

1. (Withdrawn) A method of inhibiting Akt, comprising using a compound represented by formula I:



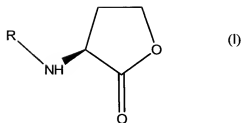
wherein R is C<sub>4-30</sub> linear or branched acyl, which may be substituted.

2. (Withdrawn) The method of claim 1, wherein R is C<sub>4-30</sub> linear or branched acyl having oxo at position 3.
3. (Withdrawn) A method of inducing apoptosis in cells, comprising using a compound represented by formula I:



wherein R is as defined above.

4. (Previously presented) A method of screening for a substance that inhibits acylated homoserine lactone, comprising
- (i) culturing animal cells with a test substance in the presence of acylated homoserine lactone represented by formula I:



wherein R is C<sub>4-30</sub> linear or branched acyl, which may be substituted;

(ii) detecting one or more of

(a) phosphorylated-Akt,

wherein increased phosphorylation reflects inhibition of acylated homoserine lactone,

(b) apoptosis, or (c) caspase activity,

wherein the apoptosis or caspase activity is modulated by Akt and

wherein decreased apoptosis or decreased caspase activity reflects inhibition of acylated homoserine lactone; and

(iii) identifying the substance as one that inhibits acylated homoserine lactone.

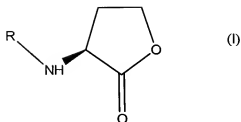
5. (Previously presented) The method of claim 4, wherein apoptosis is detected.

6. (Withdrawn) A substance inhibiting acylated homoserine lactone, which is identified by the screening method of claim 4.

7. (Withdrawn) An acylated homoserine lactone inhibitor, which is identified by the screening method of claim 4.

8. (Withdrawn) A kit for using in the screening method of claim 4, comprising the following elements:

a) an acylated homoserine lactone represented by formula I:



wherein R is as defined above,

b) an animal cell, and

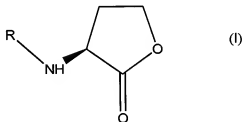
c) a means for measuring Akt activity.

9. (Withdrawn) A substance inhibiting acylated homoserine lactone, which is identified by the screening method of claim 5.

10. (Withdrawn) An acylated homoserine lactone inhibitor, which is identified by the screening method of claim 5.

11. (Withdrawn) A kit for using in the screening method of claim 5, comprising the following elements:

a) an acylated homoserine lactone represented by formula I:



wherein R is as defined above,

b) an animal cell, and

c) a means for measuring Akt activity.

12. (Previously presented) The method of claim 4, wherein caspase activation is detected.

13. (New) The method of claim 4, wherein phosphorylated Akt is detected.